

REMARKS

Claims 1-6 have been amended. New claims 8-12 have been added. Reexamination and reconsideration are respectfully requested.

Applicant submits herewith a Request for Permission to Amend Figures 3a-3c and to add Figure 1c. Corresponding amendments have been made to the specification. No new matter has been added.

Applicant has amended the title as suggested by the Examiner.

In the Office Action, claims 1-6 were rejected under 35 U.S.C. §112, second paragraph. Accordingly, Applicant has amended claims 1, 3 and 5 to distinctly claim the subcombination of the fixing holder. Additionally, Applicant has added new independent claim 8 reciting the combination of the assembly of the electronic component, fixing holder and printed circuit board. Claims 2-4 and 6 have been amended to depend from the combination assembly claim. In view of the above, Applicant submits claims 1-6 and 8 are now definite.

In the Office Action, claims 1-6 were rejected as being anticipated by INGAGLIO (US 4,399,608). Applicant respectfully traverses this rejection.

Applicant's claim 1 is directed toward a fixing holder used to fixed an electronic component to a printed circuit board. By contrast, INGAGLIO is not a holder, but rather a tool to secure a conductor to a substrate.

Moreover, Applicant's claim recites a cylindrically-shaped holder being hollow in a longitudinal direction and having top and bottom openings. Clearly, INGAGLIO's rod 21 is not hollow and, while it may have a bottom opening, it does not have any top opening (see col. 2, lines 34-39).

Also, Applicant's claim recites a main body portion and a base portion extending from the main body portion. A projection 26 is included on a side surface of the holder main body portion on the same side as the forward side opening of the base portion. Clearly, the lugs 26 and 27 of INGAGLIO's rod 21 are not formed on the holder main body, but rather on the base or bottom portion.

Accordingly, Applicant submits claim 1 is patentable over INGAGLIO.

Regarding dependent claim 3, again Applicant's claim requires the slanted surface be formed at a lower end portion of the flat surface. The flat surface is on the base portion. By contrast, the Examiner finds the alleged correspondence by the slanted surface contained on the knob 29 of INGAGLIO. However, that knob 29 is not part of the base portion, but rather is the complete opposite, i.e., part of the top portion. Hence, Applicant submits claim 3 is also patentable over INGAGLIO.

In view of the above, Applicant submits independent claim 1 and dependent claims 3 and 5 are patentable over INGAGLIO.

Additionally, Applicant has added new dependent claims 11 and 12 specifying that the projection 26 from the holder main body portion protrudes orthogonally with respect to the longitudinal direction of the holder. Of course, INGAGLIO's lugs 26 and 27 are parallel to the longitudinal direction. Also, dependent claim 12 specifies that the projection includes an engagement nail portion arranged orthogonally with respect to the projection. No corresponding feature is found on the lugs 26 and 27 of INGAGLIO. Hence, dependent claims 11 and 12 are also submitted to be patentable over INGAGLIO.

Applicant has added a new independent combination claim 8 reciting the assembly of the fixing holder, electronic component and printed circuit board. As INGAGLIO's tool 10 is not designed as a holder for an electronic component, it cannot anticipate claim 8 or render it obvious. Moreover, claim 8 includes most of the limitations of independent claim 1 and is submitted to be patentable for the reasons stated above as well. Finally, claims 2, 4 and 6, as well as new claims 9 and 10, depend from claim 8 and are also submitted to be patentable for the reasons given above.

For the foregoing reasons, Applicant submits claims 1-6 and 8-12 are now in condition for allowance. An early notice to that effect is solicited.

Summarizing, Applicant has made an important contribution to the art to which the present subject matter pertains, for which no counterpart is shown in any of the art or combination of same. The invention is fully set forth and carefully delimited in all claims in this case. Under the patent statute, Applicant should not be deprived of the protection to which he is entitled for this contribution. Accordingly, it is respectfully requested that favorable reconsideration and an early notice of allowance be provided for all remaining claims.

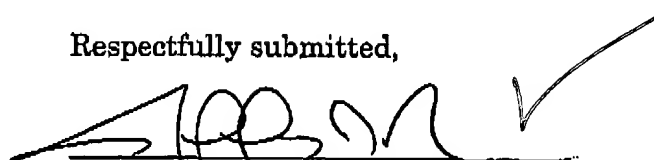
If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit
Account No. 05-1323 (Docket #3064NG/48834).

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend the specification as follows:

Please amend the third paragraph on page 1 as follows:

In general, the dipping machine includes guide rails G having U-shaped configuration in its section for guiding right and left edges of the PCB as shown in Fig. [1A] 1C. The PCB is guided by the guide rails G so as to move therealong and passes through a soldering bath provided on a way of the running path, thereby being subjected to the soldering on its lower surface.

Please amend the second paragraph on page 5 as follows:

The main body portion 2B continuously provided at the base portion 2A is provided at the front surface side of the almost center portion thereof with engagement projection portions 26, [26] having engagement nail portions 25, [25] which are inserted into and engaged with engagement holes 31, 32 provided at predetermined portions of the PCB 3, respectively.

Please amend the third paragraph bridging pages 5 and 6 as follows:

After an LED 4 is inserted into the LED holder 1 configured in this manner, the entirety of the PCB 3 is installed in the dipping machine in a state that the base portion 2A and the main body portion 2B are erected on the PCB 3 as shown in Fig. 1A. Thereafter, the LED holder is attached to the PCB 3 in the following manner as shown in Figs. 1B and 2B. That is, the main body portion 2B is inclined forward and laid down on the PCB in a manner that the slanted

surfaces 23, 23 of the front surface 22 of the base portion 2A are inclined and laid along the upper surface of the PCB 3 thereby to contact the front surface 22 formed by the flat surface to the upper surface. Further, the engagement projection portions 26[, 26] are inserted into and engaged with the engagement holes 31, 32 of the PCB 3 so that the engagement nail portions 25[, 25] prevent the engagement projection portions 26 from coming out of the engagement holes 31, 32, respectively, whereby both the tip portion 27 of the main body portion 2B and the LED 4 protruding from the tip portion 27 protrude from the edge of the PCB 3.

Please amend claims 1-6 as follows:

1. (Amended) A fixing holder for fixing an electronic component having wire-shaped leg portions to a printed circuit board,

said holder being an almost cylindrical-shaped holder [for holding] adapted to hold the electronic component, the holder being hollow in a longitudinal direction and having top and bottom openings such that the electronic component is capable of protruding from the top opening and [having] the wire-shaped leg portions [in a manner that the leg portions pass] are capable of passing through and [protrude therefrom] protruding from the bottom opening,

said fixing holder comprising:

a holder main body portion [for holding] adapted to hold a main body portion of the electronic component; and

a base portion [continuously provided to] extending from said holder main body portion, wherein

one surface of said base portion on a forward side is opened to form [an] a side opening, at least a portion of a periphery of the forward side opening [is] being configured to form a flat surface, and

a side surface of said holder main body portion on a side where the forward side opening is formed [is protruded forward to form an engagement nail portion to be engaged] includes a projection protruding forward and adapted to engage with the printed circuit board.

2. (Amended) The [fixing holder for fixing the electronic component having the wire-shaped leg portions to the printed circuit board] assembly according to claim [1] 8, wherein

the leg portions [passed through said holder are dipped in a state that the leg portions] protruding from the bottom opening are passed through holes formed at the printed circuit board and dipped in that state,

thereafter said holder main body portion is inclined forward and laid down on the printed circuit board [in a manner] such that the flat surface is made in contact with an upper surface of the printed circuit board, and

said [engagement nail portion] projection is inserted into and engaged with an engagement hole formed at the printed circuit board to fix said holder to the printed circuit board.

3. (Amended) The fixing holder for fixing the electronic component having the wire-shaped leg portions to the printed circuit board according to claim 1, wherein

a slanted surface is formed at a lower end portion of the flat surface [so that, when said holder main body portion is inclined forward and laid down, the slanted surface contacts to the printed circuit board thereby to incline and lay said holder] whereby the flat surface is adapted to contact an upper surface of the printed circuit board when inclined forward to lay down the fixing holder.

4. (Amended) The [fixing holder for fixing the electronic component having the wire-shaped leg portions to the printed circuit board] assembly according to claim 2, wherein

a slanted surface is formed at a lower end portion of the flat surface so that, when the holder main body portion is inclined forward and laid down, the slanted surface contacts [to] the upper surface of the printed circuit board [thereby to incline and lay said] to facilitate inclining and laying down the holder.

5. (Amended) The fixing holder for fixing the electronic component having the wire-shaped leg portions to the printed circuit board according to claim 1, wherein

the forward side opening [is arranged in a manner that] in the base portion is dimensioned such that, when said holder main body portion is inclined

forward, the wire-shaped leg portions [move] are capable of moving freely within the opening.

6. (Amended) The [fixing holder for fixing the electronic component having the wire-shaped leg portions to the printed circuit board] assembly according to claim 2, wherein

the lateral side opening is arranged in a manner that, when said holder main body portion is inclined forward, the wire-shaped leg portions move freely within the opening.